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ABSTRACT

Chapter 1 of the Education Consolidation and Improvement Act of 1981, like its predecessor, Title I of the Elementary and Secondary Education Act of 1985, provides federal funding for compensatory education programs. Throughout its twenty years of existence, the program has been subject to contradictory claims about its purpose and its effectiveness. This paper presents the most current data about the program, and compares and contrasts recent findings and trends with historical reports on the program. Information is provided on the number and types of districts that receive Chapter 1 funds, on the numbers of children served by the program and their relative status on measures of achievement and poverty, and on the effectiveness of program services. References are included. (Author/TE)

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TWENTY YEARS OF FEDERAL COMPENSATORY EDUCATION: WHAT DO WE KNOW ABOUT THE PROGRAM?

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April 1986

U.S. Department of Education
Office of Planning, Budget and Evaluation

U.S. DEPARTMENT OF EDUCATION
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Abstract. Chapter 1 of the Education Consolidation and Improvement Act of 1981, like its predecessor, Title I of the Elementary and Secondary Education Act of 1965, provides Federal funding for compensatory education programs. Throughout its twenty years of existence, the program has been subject to contradictory claims about its purpose and its effectiveness. In this paper, we present the most current data about the program, and compare and contrast recent findings and trends with historical reports on the program. We provide information on the number and types of districts that receive Chapter 1 funds, on the numbers of children served by the program and their relative status on measures of achievement and poverty, and on the effectiveness of program services.

Program Purpose

Chapter 1, like its predecessor Title I, provides "financial assistance to State and local educational agencies to meet the special needs of educationally deprived children." Congress recognized that children in low-income families had special educational needs, and that concentrations of these children in school districts adversely affected the districts' ability to provide educational programs that met these needs. The Title I legislation specified that the program was "to provide financial assistance ... to local educational agencies serving areas with concentrations of children from low-income families..."

Distribution of Funds

Given the statement in the law that the program is to serve school districts with large numbers or high concentrations of children from low-income families, one might assume that the funds would be given only to those districts with high proportions of poor children. This is not the case--in fact, Chapter 1 serves about 90 percent of the school districts in the country, and the districts that do not participate tend to be very small, rather than wealthy.

A brief description of the funds allocation process can explain why Chapter 1 is not limited to serving poor districts. Congress appropriates funds for Chapter 1 each year; the Department of Education (ED) then calculates state and county allocations using a formula which takes into account, among other things, the number of 5 to 17 year old children in low-income families and the average state per-pupil expenditure. A county must have at least 10 eligible children to be eligible for a grant. Almost 8 million poor (or "formula-eligible") children are counted in this allocation formula. States then make allocations to school districts, and the school districts identify eligible school attendance areas with "high" concentrations of children from low-income families. But "high" is a relative term--attendance areas which are eligible in one district might not be eligible if they were part of a poorer district.

Chapter 1 Allocations. All states, the District of Columbia, Puerto Rico, and the Bureau of Indian Affairs receive Chapter 1 grants. State allocations for the Local Educational Agency Basic Grants portion of the program, for the 1983-84 school year, ranged from $280,628,132 (New York) to $3,431,963 (Wyoming). Table 1 presents the allocation patterns of Chapter 1 funds, per child and per poor child. As Table 1 shows, only five states receive allocations greater than $75 per child, or over $500 per poor child.

Table 1

Dollars per Child and Dollars per Poor Child

All Children			Poor Children		
Dollars	Number of States	Percent of States	Dollars	Number of States	Percent of States
Under $25	0	(0)	Under $300	0	(0)
$25-50	16	(31)	$300-349	15	(29)
$51-75	30	(59)	$350-399	9	(18)
$76-100	4	(8)	$400-449	10	(20)
Over $100	1	(2)	$450-499	15	(29)
			$500-550	2	(4)
Total	51				

Based on FY 1984 allocations and 1980 Census counts of children aged 5-17.

States distribute Chapter 1 funds to school districts based on the number of poor children and the state per-pupil expenditure. While the law states that assistance is to be provided to "local education agencies serving areas with concentrations of children from low-income families," it is not the case that districts must have high concentrations of poor children to receive funds. As mentioned earlier, 90 percent of districts receive grants. The districts that do not receive grants, are not, as one might assume, the wealthier districts--they are the very small districts. The likelihood of receiving a Chapter 1 grant is directly related to a district's size, and not so much to its poverty. In 1983-84, 98 percent of school districts with 2,500 or more students received grants, compared to 96 percent of districts with 1,000 to 2,499 students and only 72 percent of districts with under 1,000 students.

Since any district with eligible children may apply for a grant, relatively wealthy districts receive Chapter 1 funds, as shown in Table 2. In the 44 states for which data were available, we found that over 85 percent of the districts which have median family incomes in the top 25 percent of districts in the nation received funds, about the same proportion as in the other quartiles of median family income. (While it appears that a smaller percentage of less wealthy districts receive grants than do wealthy districts, this is because less wealthy districts tend to be smaller.)

Of the districts that were in the top one percent of median family income, nearly 80 percent received grants. While only 16 percent of Chapter 1 funds go to districts in the top quarter of income, this represents about $400 million in Federal assistance.

The District Practices Study (DPS) also looked at the distribution of funds to school districts, and, in addition, looked at distributions to schools. The DPS found that approximately 90 percent of districts received Title I funding during the 1981-82 school year, a similar figure to ED's 1983-84 estimate of about 87 percent (Anderson, 1985). We believe that the lower ED figure is due to missing data--several states, including California, are not included in the later figure--rather than to any decrease in the percent of districts receiving funds.

Table 4

Percent of Title I/Chapter 1 Districts by Poverty Level

Percent of Students From Families At or Below Poverty Line	Description	Percent of Districts	
		Title I Districts (DPS, 1981-82)	Chapter 1 Districts (ED, 1983-84)
.1 - 4.9	Low Incidence	17	15
5 - 11.9	Moderate Incidence	35	33
12 - 24.9	High Incidence	31	36
25 and over	Severe Incidence	17	16

How are schools selected for Chapter 1?

Once school districts receive their allocations, resources are distributed to schools with the highest concentrations of poor children. In general, "high" means above average (for the district), or greater than 25 percent of the children in poverty. And, for districts with "no wide variance" in poverty levels, all schools can be considered eligible. The law and regulations grant districts some additional flexibility in how attendance areas may be selected; for instance, districts may decide to focus services on particular grade spans, and would only then have to rank schools serving those grade spans. Overall, nearly three-fourths of the school districts provided Title I funds to all eligible schools.

The DPS found that the most common source districts used to select schools was free or reduced price lunch counts. These counts are good proxy measures of poverty, and result in the schools with the highest concentrations of poverty in each district being selected for Chapter 1. However, while schools are ranked within districts, no external criteria of need are applied. Given the very different levels of poverty across Chapter 1 districts, this procedure means that schools which are relatively needy, and thus served, in one district might be relatively wealthy, and thus not served, in another. If we were to rank schools across districts, or across the nation, we would find many unserved schools with higher poverty rates than schools which were served.

The Sustaining Effects Study (SES), conducted by the System Development Corp. and completed in 1983, found that at the elementary school level, about half the schools with less than 20 percent of their children in poverty nevertheless participated in Title I. Of those schools with more than 30 percent of their children in poverty, about 85 percent participated.

Selecting Students

Once Chapter 1 schools are identified, students attending them (or students who reside in the attendance area but who attend private schools) are selected to participate in the program based upon educational, not economic, criteria. The result of this statutory selection requirement is that many non-poor children are served by Chapter 1.

Poverty and Participation. The SES found that more non-poor than poor students received Title I services, a finding that has been widely cited as a failing of the program. The SES found that in 1976-77, approximately 1,230,000 poor students and 1,693,000 non-poor students received Title I services, while approximately 2,500,000 poor students received neither Title I nor other compensatory services (see Table 5). The SES also found that more low-achieving[1] students did not receive services than received services.

In fact, given the requirements of the statute, and the demographics of the populations involved, that finding should not have been very surprising.

Table 5

Percentage and Number of Students Receiving Various Compensatory Education Services by Family Economic Status (from SES Final Report)

	Compensatory Education (CE) Status				
Economic Status	Title I or Title I and Other CE	Other CE Only	No CE at CE School	No CE at Non-CE School	Total
Poor	29%	11%	53%	7%	100%
Non-poor	11%	10%	64%	16%	101%
		Number of Students			
Poor	1,230,000	443,000	2,199,000	309,000	4,181,000
Non-poor	1,693,000	1,551,000	10,065,000	2,516,000	15,825,000
Total	2,923,000	1,994,000	12,264,000	2,825,000	20,006,000

Critics of the program have often equated proper targeting with expenditure on poor children, despite the fact that the law specifically requires that children be selected based on their educational, not economic disadvantagement. Walberg (1984) cited prior studies to highlight the issue, stating that "Many poor children, as much as 100 percent in some school districts, are not reached at all; and substantial fractions of funds, more than half in many instances, are spent on non-poor children."

1 Low-achieving is defined as achieving one or more years below grade level.

He viewed this as an inaccuracy in implementation, which "produces two kinds of arbitrary governmental favoritism--spending extra money on some poor children and not others, and spending extra money on some non-poor children and not others (Walberg, 1984, p. 12)."

Yet, despite a law that specifically requires that children not be selected on the basis of economic status, and given a ratio of non-poor children to poor children of almost 4:1, the ratio of non-poor to poor children in Title I was only slightly above 1:1. In other words, poor children participated in Title I at triple the rate of non-poor children.

Educational Achievement and Participation. Chapter 1 participants are, on the average, substantially more educationally disadvantaged than non-participants. The higher the grade level examined, the more disadvantaged the Chapter 1 group tends to be.

The relationship between educational achievement level and participation in compensatory education has been examined in many studies, including the SES and the DPS, and in annual data collected from states and analyzed by ED. Table 6 and Table 7 present, respectively, the average reading and mathematics achievement levels of Chapter 1 participants in school year 1983-84.

Table 6

Chapter 1 Participants' Reading Achievement
School Year 1983-84

	Annual Testing Cycle					Fall-to-Spring Testing Cycle				
	Weighted					Weighted				
	Number	Percentile		NCE[1]		Number	Percentile		NCE	
Grade	Tested	Pre	Post	Pre	Post	Tested	Pre	Post	Pre	Post
2	93,959	29	31	39	40	182,490	21	36	33	43
3	115,160	24	29	35	38	158,221	20	32	32	40
4	119,437	24	29	35	38	140,961	20	32	32	40
5	121,383	23	28	35	38	121,558	20	30	32	39
6	105,021	23	28	35	38	106,666	20	30	32	39
7	65,246	23	27	35	37	69,429	20	28	32	38
8	65,826	23	27	34	37	49,866	20	28	32	38
9	31,349	23	25	34	36	30,818	18	26	31	36
10	13,489	18	20	31	32	17,992	18	24	31	35
11	7,967	17	18	30	30	9,737	15	20	28	32
12	4,506	16	16	29	29	5,873	14	20	27	32

[1] NCEs are a form of standardized test scores based on percentiles and used by school districts, States, and ED since 1980 for purposes of aggregation and reporting. The NCE (or Normal Curve Equivalent) has a mean of 50, and a standard deviation of approximately 21. There would be no change in NCEs when a group has stayed at exactly the same percentile from pretest to posttest; thus, an NCE gain indicates an increase in the percentile standing of a group, and an NCE loss indicates a decrease in a group's relative standing.

Table 7

Chapter 1 Participants' Mathematics Achievement
School Year 1983-84

	Annual Testing Cycle					Fall-to-Spring Testing Cycle				
	Weighted Number	Percentile		NCE		Weighted Number	Percentile		NCE	
Grade	Tested	Pre	Post	Pre	Post	Tested	Pre	Post	Pre	Post
2	54,790	35	40	42	45	63,922	21	42	33	46
3	64,629	31	37	40	43	68,215	20	38	32	43
4	72,558	28	34	38	41	68,328	22	39	34	44
5	77,677	28	35	37	42	65,350	22	36	33	42
6	68,235	28	35	38	42	55,456	22	36	34	42
7	39,072	25	31	36	39	36,483	23	34	35	41
8	45,842	28	33	38	41	28,589	23	32	34	40
9	22,635	30	32	39	40	18,012	21	32	33	40
10	8,372	24	24	35	35	7,485	23	29	34	38
11	5,096	25	26	36	37	3,297	21	30	33	39
12	3,352	22	25	34	36	1,859	22	29	34	38

As Table 6 and Table 7 show, the relative achievement status of Chapter 1 reading participants is lower than that of mathematics participants, and more disadvantaged students tend to be served in the higher grades.

- At the elementary school level, the average post-Chapter 1 student scored at about the 30th percentile in reading and at the 35th percentile in mathematics;
- In junior high, average posttest scores at the 27th percentile in reading and the 32nd percentile in mathematics are typical;
- In high school, Chapter 1 is a program serving relatively few, but very low-achieving, students. The average reading score of a high school reading program participant is around the 19th percentile, and for a typical mathematics participant is around the 27th percentile.

Number of students served.

Information on the number of students served by the program is available both from national studies and from annual State performance reports.

ED first began collecting uniform data from states on the numbers of students served in the 1979-80 school year, and data are now available through the 1983-84 school year. These data are presented in Table 8, and they show that while about 5 million students were served each year, these numbers have fluctuated somewhat. The data from the State reports have been criticized as being inaccurate and unreliable, due to inaccuracies in State reporting, so we compared the estimates from the state reports to those from the District Practices Study (See Table 9) to assess the amount of error in the State-provided data.

With the likelihood that the DPS may be slightly underestimating the participation count for Chapter 1, and the almost certainty that some states overcount their Chapter 1 participants, our best estimate of Chapter 1 participation for the 1981-82 school year is about 4,750,000 students.

Table 8

Number of Children Served in Chapter 1
School Years 1979-80 through 1983-84

Grade Span	1979-80		1980-81		1981-82		1982-83		1983-84	
	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Pre-K and K	362,082	(7)	365,371	(7)	332,355	(7)	343,658	(7)	348,863	(7)
Grades 1-3	2,030,204	(38)	1,926,915	(36)	1,733,416	(36)	1,738,040	(37)	1,773,305	(37)
Grades 4-6	1,789,199	(33)	1,763,536	(33)	1,632,873	(34)	1,579,517	(33)	1,565,784	(32)
Grades 7-9	939,427	(17)	986,493	(19)	886,111	(18)	812,182	(17)	873,946	(18)
Grades 10-12	237,877	(4)	259,018	(5)	268,429	(6)	226,922	(5)	284,041	(6)
Total	5,402,311		5,301,488		4,866,108		4,731,351		4,846,050	

Note: Columns do not sum to the totals because some students who were served in ungraded classes are not included in the grade span breakouts.

Table 9

Number of Students Served in the 1981-82 School Year:
District Practices Study and State Performance Reports

Grade	DPS Estimate	State Estimate
Pre-K	45,228	43,771
Kindergarten	230,778	288,578
1	463,832	560,269
2	642,327	585,953
3	526,237	587,194
4	515,085	580,143
5	494,872	561,964
6	420,928	490,766
7	295,383	364,933
8	248,575	302,348
9	167,126	218,830
10	111,149	133,479
11	70,203	77,706
12	47,388	57,244
Total	4,279,111	4,866,108*

*Includes ungraded students

Two of the major reasons for inaccuracy in state-reported data include counting children in state compensatory education programs as Chapter 1 participants (in one large state alone, this may account for almost a 40 percent inflation in the Chapter 1 participation count), and the use of unreliable sampling plans to estimate statewide data.

Proportion of students served by Chapter 1. Nationwide, about 10 percent of children received Chapter 1 services in 1983-84, but there was considerable variation across states, with from 4 percent to 20 percent served. This variation is due both to differences in proportions of poor children and to differences in how services are concentrated.

Table 10

Percent of Children Served
in Chapter 1 1983-84 School Year

Percent Served	Number of States
4.0- 7.49	21
7.5- 9.9	21
10.0-12.49	5
12.5-14.9	2
15.0-17.49	1
17.5-20.0	1

Participation of Private School Students. Of the 4.8 million children receiving Chapter 1 services in 1983-84, just over 4 percent attended private schools. Table 11 shows the numbers of private school students who participated in Chapter 1 since 1979-80.

Table 11

Number and Percent of Chapter 1 Children
in Nonpublic Schools

Year	Number Served		Percent Nonpublic
	Nonpublic	Total	
1979-80	189,654	5,402,311	3.5
1980-81	213,499	5,301,488	4.0
1981-82	184,084	4,866,108	3.8
1982-83	177,161	4,731,351	3.7
1983-84	225,123 [3]	4,846,050	4.6

[3] California reported 34,567 of the 47,962 additional students served in 1983-84.

However, the pattern of private school participation is likely to change in the 1985-86 and 1986-87 school years, given the implications of the Supreme Court's Felton decision. In ruling that public school staff cannot legally provide services to students in religiously-affiliated private school buildings, the Felton decision has created a precarious situation both for the public school administrators and the private school students. On the one hand, a school district is required by the Chapter 1 statute to provide "equitable" services to children who attend private school; on the other hand, requiring that the services be provided at a "neutral" site almost certainly results in difficulties in implementing educationally sound programs.

And while ED, the courts, the states, the public schools and the private schools all attempt to reach consensus on appropriate vehicles for providing services to religious-school students, there is growing evidence that private school children--perhaps as many as one-third of those who participated in 1984-85--are not receiving any services in the interim.

What is the cost of providing services to students?

Nationally, about $600 is available per Chapter 1 child. This ranges from a reported low of $280 in California to a high of $1,133 in Alaska. We suspect that the California figure is low because students receiving state-funded compensatory education services are included in the count of Chapter 1 students, while the state compensatory education funds are not included in the state Chapter 1 funding amount. The next lowest figure is $390 in Puerto Rico, followed by $393 in Indiana and $471 in Maine. Table 12 provides the distribution of per-capita Chapter 1 funding across states.

Table 12

Dollars per Child Served in Chapter 1 in 1983-84

Dollars per Child	Number of States	(Percent of States)
Under $400	2	(4)
$400-$499	3	(6)
$500-$599	13	(25)
$600-$699	14	(27)
$700-$799	10	(20)
$800-$899	6	(12)
$900 and up	3	(6)
Total	51	

What Types of Services are Provided?

Chapter 1 continues to focus on providing services in the basic skills. Each year, about three-quarters of all Chapter 1 students receive reading services, and nearly half receive math. Table 13 provides the five-year trends of participation, by service area.

Table 13

Number of Children Receiving Services by Service Area, 1979-80 through 1983-84

Service Area	1979-80 Number	(%)	1980-81 Number	(%)	1981-82 Number	(%)	1982-83 Number	(%)	1983-84 Number	(%)
Instructional										
Reading	4,197,336	(78)	3,846,228	(73)	3,485,024	(72)	3,508,280	(74)	3,613,823	(75)
Mathematics	2,483,044	(46)	2,225,264	(42)	2,066,220	(42)	2,145,306	(45)	2,203,489	(46)
Language Arts	1,053,144	(19)	832,130	(16)	945,804	(19)	899,294	(19)	1,040,065	(22)
Limited English	374,590	(7)	447,547	(8)	481,224	(10)	521,873	(11)	592,062	(12)
Handicapped	9,084	(0)	15,704	(0)	12,587	(0)	9,499	(0)	11,772	(0)
Vocational	5,571	(0)	6,565	(0)	11,094	(0)	45,799#	(1)	54,774	(1)
Other	1,039,651	(19)	273,831*	(5)	1,078,113	(22)	469,101	(10)	436,942	(9)
Supporting										
Guidance	792,615	(15)	1,184,701	(21)	1,014,881	(21)	808,714	(17)	817,239	(17)
Health/Nutrition	1,518,798	(28)	1,112,883	(22)	851,479	(17)	702,899	(15)	714,249	(15)
Transportation	138,148	(3)	302,579	(6)	343,941	(7)	274,768	(6)	229,558	(5)
Other	421,070	(8)	555,549	(10)	714,409	(15)	243,522	(5)	321,160	(7)
Total Served	5,402,311		5,301,448		4,866,108		4,731,351		4,846,050	

* The decrease is due largely to California, which did not report the number of students served in other instructional areas in 1980-81.

\# The increase is due largely to California, which did not report the number served in the vocational area prior to 1982-83.

After a three-year decline, the numbers of children participating in reading or mathematics program began to increase in 1983, at least partly in response to increasing funding levels beginning that year. The number of participants receiving English instruction for limited-English-proficient students rose across all five years for which we have data, from a low of almost 375,000 in 1980 to almost 600,000 in 1984.

In contrast, while unreliable, the reported numbers of recipients of supporting services has declined in all categories.

Who provides services?

The majority of Chapter 1 staff are teachers (44 percent) or teacher aides (42 percent.) There appears to be a decresing reliance on teacher aides, who constituted 46 percent of all staff in 1979-80 but only 42 percent in 1983-84, while the percent of teachers over this same period has risen from 39 percent to 44 percent (see Table 14). The program supports relatively few administrators: only three percent of the staff each year fall into this category.

Table 14

Number of Staff Providing Chapter 1 Services, 1979-80 through 1983-84

Category	1979-80		1980-81		1981-82		1982-83#		1983-84	
	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Teacher Aides	91,457	(46)	83,921	(44)	71,698	(41)	60,897	(40)	65,626	(42)
Teachers	78,495	(39)	81,022	(42)*	75,552	(44)	69,638	(45)	68,363	(44)
Others	6,608	(3)	6,406	(3)	8,237	(5)	7,976	(5)	4,025	(3)
Admin. Staff	6,312	(3)	4,367	(2)	4,824	(3)	3,975	(3)	4,071	(3)
Support Staff	6,304	(3)	6,567	(3)	5,741	(3)	5,335	(3)	5,846	(4)
Curriculum Specs.	6,242	(3)	2,074	(1)*	2,626	(1)	1,804	(1)	2,036	(1)
Clerical Staff	5,076	(3)	6,682	(3)	4,766	(3)	4,273	(3)	5,246	(3)
Total	200,494		191,038		173,444		153,897		155,212	

* The increase in number of teachers and decrease in number of curriculum specialists from 1979-80 to 1980-81 was due to changes in reporting procedures in two States. Staff who had been reported as curriculum specialists in 1979-80 were reported as teachers in 1980-81.

\# New Jersey did not report staff information for 1982-83. New Jersey's staff information has been substituted to provide a more realistic national estimate.

As Table 14 shows, the number of staff positions supported under Chapter 1 has declined almost 25 percent. Over that same period of time, the number of students served has declined only 10 percent. As a result, the nationwide ratio of students to full-time-equivalent staff member has been increasing (see Table 15). While this is not a dramatic rise (from a low of 27-to-1 to a high of 31-to-1), it may signify a move away from traditional pull-out programs to more in-class instruction, to more children in a given program, or to shorter periods of instruction. Note however, that the ratios below do not imply class sizes of 30 children. For instance, since Chapter 1 instruction may be an hour a day, a Chapter 1 teacher may serve 30 children in 5 groups of 6 children each.

Table 15

Staff to Student Ratios, 1979-80 through 1983-84

Year	Number of Students	Number of Staff	Student/Staff Ratio
1979-80	5,402,311	200,494	27-to-1
1980-81	5,301,488	191,038	28-to-1
1981-82	4,866,108	173,444	28-to-1
1982-83	4,731,351	153,897	31-to-1
1983-84	4,846,050	155,212	31-to-1

The cost per staff member was approximately $17,500 in 1983-84 (see Table 16). Given that this figure includes costs for direct salary, indirect costs, and materials and equipment, it is likely that state and local funds provide at least part of the support for Chapter 1 staff.

Table 16

Cost per Staff Member, 1979-80 through 1983-84

Year	Chapter 1 Funding	Chapter 1 Staff	Cost per Staff Member
1979-80	2,776,577,501	200,494	$13,849
1980-81	2,731,651,464	191,038	$14,299
1981-82	2,611,386,972	173,444	$15,056
1982-83	2,562,753,163	153,897	$16,652
1983-84	2,727,587,368	155,212	$17,573

Does the program improve achievement?

Data addressing the issue of the effectiveness of Chapter 1 comes from two types of sources: locally-conducted evaluations and national studies. Since 1980, states have aggregated the results of local evaluations and provided that information to ED annually. Information from the 1983-84 state performance reports has already been presented in Tables 6 and 7. Table 17 presents, for five years, the national annual achievement gains. The data show modest, but positive, program effects, and, at least at the elementary school level, the picture is very consistent with that offered by Carter (1984).

Table 17

Title I/Chapter 1 Annual Achievement Gains as Reported by States, 1979-80 to 1983-84

Grade	Reading					Mathematics				
	Weighted NCE Gain Scores					Weighted NCE Gain Scores				
	79-80	80-81	81-82	82-83	83-84	79-80	80-81	81-82	82-83	83-84
2	0.6	1.6	1.0	0.9	1.0	1.4	2.3	3.5	1.7	3.2
3	2.2	3.4	2.4	2.8	3.0	0.8	2.4	2.7	2.4	3.2
4	2.1	3.0	2.7	2.6	2.9	1.8	3.3	2.6	2.7	3.1
5	2.6	3.4	3.3	3.2	3.1	2.5	2.9	3.6	4.5	4.4
6	3.5	4.1	3.4	3.4	3.2	4.1	5.1	4.6	4.9	4.0
7	1.8	2.0	2.3	2.2	2.5	2.6	2.0	3.1	4.4	3.5
8	1.8	2.9	2.9	3.1	2.4	2.8	2.8	3.0	3.6	3.1
9	2.0	2.1	2.0	2.7	1.6	1.1	0.7	1.0	2.2	0.7
10	-0.5	1.7	0.7	1.5	1.1	-0.9	0.4	0.1	1.4	0.7
11	-1.5	2.2	0.5	-0.6	0.3	0.8	0.9	0.5	0.8	1.1
12	1.8	0.2	1.7	-0.3	0.3	1.1	-0.2	0.6	0.3	1.9

Questions about the effectiveness of the program have been asked since its inception. Despite the discouraging findings of initial reports, and later national evaluations, the general opinion among practioners had been that the program was effective in improving achievement for the children served. However, debate over the magnitude of program effectiveness, and cost-effectiveness, has resurfaced in recent years.

We present below a brief summary of the most recent articles and studies about the effectiveness of Chapter 1. Most of the debaters have not collected new data: the majority cite the findings of the Sustaining Effects Study (SES), a $20 million dollar study of the effectiveness of Title I begun in 1976. The SES collected longitudinal data on grades 1 through 6 students receiving Title I and other compensatory services. Despite the fact that the SES data are now nearly a decade old, they remain the most comprehensive and compelling of the national evaluation data bases. The cost of duplicating the study today would be prohibitive.

Carter (1984), in summarizing the results from the SES, said that "Title I was effective for students who were only moderately disadvantaged, but it did not improve the relative achievement of the most disadvantaged part of the population." Compensatory education was found to be more effective in the lower grades than in the higher grades, and by the time that students were in junior high school, there was no evidence of sustained or delayed effects of Title I.

Virtually all of the subsequent writing about the impact of Chapter 1 builds on the SES' findings. Mullin and Summers (1983) examined 47 studies of the overall effectiveness of compensatory education, in addition to the SES. The article is not without its inaccuracies: the authors note that "...the federal government is estimated to have spent about $1.5 billion on more than 1.5 million children [on early intervention or compensatory education] year 1979..." when in fact the Title I basic grant program alone was funded at $2.8 billion in 1979, and over 5 million students were served. However, the article does provide a brief overview of a range of studies, and provides a set of conclusions that, for the most part, ring true.

The general conclusions are that:

- The programs have a positive, though small, effect on the achievement of disadvantaged students.
- The results of most studies are overstated because of the upward biases inherent in several standard statistical procedures.
- The gains appear to be greater in earlier years, and the evidence is fairly strong that early gains are not sustained.
- No significant association exists between dollars spent and achievement gains.
- No instructional approach or program characteristics was consistently found to be effective.

Stickney and Plunkett (1983) suggest that Title I was more effective than Mullin and Summers indicate. They indicate that "Federal compensatory programs, such as Title I and Head Start, may have fallen short of their lofty goals of equalizing I.Q. and achievement, but they <u>are</u> making a difference."

Walberg (1984), after a review of studies of the program that in particular draws upon Mullin and Summers, concluded that "On balance Chapter 1, appears to have done little good for students: it has neither raised the achievement of the educationally-deprived and poorest students, nor reduced the gap between them and other students. Indeed, more Chapter 1 funds have often been spent on non-poor than poor students, and the program has put many of the poorest and most educationally deprived students at a relative disadvantage...its net effect may have been to contribute to inequality and to the declining productivity of America's schools."

Allington (1985) believes that Chapter 1 has outlived its usefulness. He states that "At the national level the picture is quite dismal, with little evidence that ... [the] program is effective. However, the large-scale evaluations have tended to lump the good, the bad, and the mediocre programs together and so the effects of the best efforts are often obscured."

Discussion and Conclusions

Many of the early supporters of the original Title I legislation believed, as was common during the "Great Society" period of the mid-1960's, that quick infusions of money could provide a "boost" that would rapidly solve massive social problems and eliminate differences between poor and middle-class children. They believed that brief periods of compensatory education would allow children to permanently overcome educational deficits--despite the fact that many of the children would continue to be in educationally deprived situtations.

These early, and possibly unrealistic, expectations became the standard against which program success was measured, and led critics to dismiss the program as ineffective. The primary complaints about the program have been that (a) many students who are served by the program are not poor and (b) many students continue to need assistance year after year.

First, we would like to note that the Title I (and Chapter 1) legislation never has contained a requirement that only poor children be served by the program. As a matter of fact, the requirements for student selection--that is, that students are to be selected according to educational deficits--virtually ensure that nonpoor children will be served. And the requirement that Chapter 1 serve only eligible attendance areas ensures that some poor, educationally disadvantaged children will not qualify for services.

That being said, we can address a question often asked about Chapter 1 but rarely understood -- how many "eligible" children are actually served by the program? But eligible can have many meanings, depending on who is asking the question, and the question can thus have many answers. Eligible sometimes is used to refer to "formula-eligible" children (poor children counted in the allocation formula), it sometimes refers to poor children in Chapter 1 districts, or in Chapter 1 schools, and it sometimes refers to poor, low-achieving children.

But the law specifies who is eligible for Chapter 1 services -- low-achieving children living in eligible attendance areas. About 42 million children attended school (kindergarten through high school) in the United States in 1982; of these approximately 28 million were below the high school level.

Given that about 90 percent of the nation's school districts participate in the program, and about two-thirds of the schools in participating districts are considered eligible, we can further estimate that between 25 and 30 million children live in eligible attendance areas. Of that number, perhaps 10 million are educationally disadvantaged (i.e. they score below the 40th percentile on standardized tests), and hence eligible to participate in the program. (Actually, the eligible pool may be significantly less than this, since this estimate also includes the special education population.)

The 5 million children served by the program will not entirely overlap this group of 10 million (they are not a perfect subset, for instance, since some of the children in Chapter 1 may be over the 40th percentile), but this does lead us to conclude that about 40 to 50 percent of children eligible by law to participate in the program do so.

Second, we need to acknowledge that many students will need supplemental assistance throughout their school careers. The Sustained Achievement Study (Gabriel et al, 1985), an assessment of achievement patterns over two years on 65,000 students in 17 school districts, hypothesized that there may be three distinct subpopulations in relation to compensatory education assistance: the general subpopulation, the remedial subpopulation, and the compensatory subpopulation.

The general subpopulation consists of average or above average students who will never need remdial help. The remedial subpopulation, which is slightly below average, may need short-term help to catch up to grade level, and the compensatory subpopulation, which achieves at a significantly lower level, may need fairly continuous help. And in fact, data from all sources strongly suggest that the less disadvantaged participants in compensatory education seem to benefit significantly from the additional instruction. It is the lowest-achieving student that benefits the least.

ED will be sponsoring an initiative in 1986 to identify Chapter 1 programs that are particularly effective at serving very low-achieving children. We will assess the factors that contribute to the success of these programs, in particular the strategies they employ to enhance parental involvement and to expand the learning environment and experiences of the children.

Many Chapter 1 children may come from homes that do not provide educational stimulation--thus the children have an "educational deficit." For the period of time that the children receive supplemental services, they may be closer to being on an equal footing with the children from a more stimulating homes. However, once the supplemental services are eliminated, the child is once more at a disadvantage compared with the non-Chapter 1 child, who is receiving "supplemental" services at home. It is unclear why anyone would expect the children to keep up with the more advantaged children unless services are continued.

An analogy here might be child nutrition programs. If a child is being poorly fed at home, we recognize the need to feed him for as long as that condition holds true--we do not expect that we can provide him with a nourishing lunch for two years, eliminate the lunch, and see him continue to be healthy two or four years down the road.

Other Chapter 1 children, whether or not they come from "educationally-deprived" homes, may need supplemental and special help during their entire school careers in order to obtain competency in critical basic skill areas. The standard of success for these children should be that they obtain these skills, and become productive adult citizens, not that they "catch up" with an average group of students.

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